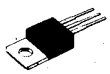
No.1311

2SC3175



NPN Epitaxial Planar Type Silicon Transistor

FOR CRT HORIZONTAL DEFLECTION OUTPUT

Features:

- High switching speed
- Especially suited for use in high-definition CRT display (V_{CC}=12 to 24V)
- Wide ASO and durable against breakdown

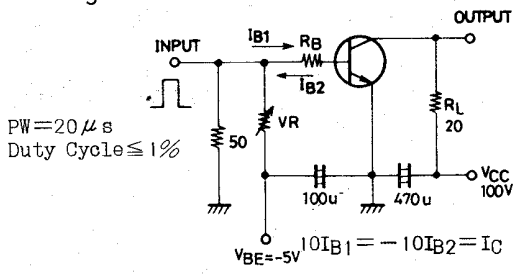
Absolute Maximum Ratings at Ta=25°C

				unit
Collector to Base Voltage	V_{CBO}		400	V
Collector to Emitter Voltage	V_{CEO}		200	V
Emitter to Base Voltage	V_{EBO}		6	V
Collector Current	I_C		7	A
Peak Collector Current	i_{cp}		12	A
Base Current	IB		4	A
Collector Dissipation	P_C	Tc=25°C	50	W
Junction Temperature	T_j		150	°C
Storage Temperature	T_{stg}		-55 to +150	°C

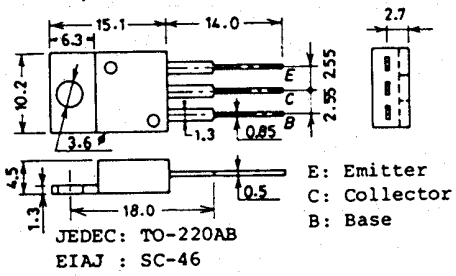
Electrical Characteristics at Ta=25°C

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	V_{CB}=200V, I_E=0			100	uA
Emitter Cutoff Current	I_{EBO}	V_{EB}=5V, I_C=0			100	uA
DC Current Gain	$h_{FE(1)}$	V_{CE}=1V, I_C=1A	15			
	$h_{FE(2)}$	V_{CE}=1V, I_C=5A	10		50	
Gain Bandiwdth Product	f_T	V_{CE}=10V, I_C=0.5A	10	40		MHz
C-E Saturation Voltage	$V_{CE(sat)}$	I_C=5A, I_B=0.5A			1	V
B-E Saturation Voltage	$V_{BE(sat)}$	I_C=5A, I_B=0.5A			1.2	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	I_C=1mA, I_E=0	400			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	I_C=1mA, R_{BE}=∞	200			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	I_E=1mA, I_C=0	6			V
Fall Time	t_f	I_C=5A, I_{B1}=-I_{B2}=0.5A			0.5	us

Switching Time Test Circuit



Case Outline 2010A
(unit:mm)



TOKYO SANYO ELECTRIC CO., LTD. SEMICONDUCTOR DIVISION
15-13, 6-CHOME, SOTOKANDA, CHIYODA-KU, TOKYO 101 JAPAN